

**FRANKLIN COUNTY BOARD OF HEALTH
REGULATION 701
Household Sewage Disposal Systems**

701.01 DEFINITIONS

- A. "Aerobic Type Treatment System" means any system which utilizes the principle of oxidation in the decomposition of sewage by surface absorption of air for a sufficient period of time to effect adequate treatment.
- B. "Alter" means to change by making substantive additions or deletions in location, design or materials of existing disposal systems.
- C. "Bedroom" means any room within a dwelling that might reasonably be used as a sleeping room including, but not limited to, rooms designed as a den, office, sewing room, or study.
- D. "Board of Health" means the Board of Health of the Franklin County District Board of Health, as authorized by Section 3709.02 of the Ohio Revised Code.
- E. "Building Drain" means that part of the lowest horizontal piping of a building drainage system which receives the discharge from soil, waste, and other drainage pipes inside the walls of any building, and conveys such discharge to the building sewer three feet outside the building wall.
- F. "Building Sewer" means that part of the horizontal piping of a drainage system which receives and conveys the discharge from the building drain to the public sanitary sewer, private sanitary sewer, disposal system, or other points of disposal.
- G. "Curtain Drain" means a subsoil drain that prevents the entrance of ground water into the area of the disposal system.
- H. "Disposal System" means a system which treats and disposes of sanitary sewage discharged from publicly or privately owned liquid waste containing animal or vegetable matter in suspension or solution and may include household wastes as commonly discharged from residences and from commercial, institutional, or similar facilities.
- I. "Dosing chamber" means a watertight tank to be used in conjunction with the sewage tank for the purpose of obtaining proper distribution of sewage throughout the disposal area and giving the absorption bed or trench a chance to be absorbed and dry out between dosings.

701.01 DEFINITIONS (CONT)

- J. "Dwelling" means any building or place used or intended to be used by human occupants as a single family, two family, or three family residence.
- K. "Easily Accessible" means of such location and design as to permit exposure with the use of only simple tools, such as screwdriver, pliers, open-end wrench, or other simple tools supplied by the manufacturer.
- L. "Evapo-transpiration" means a system used for on-lot disposal of aerated effluent. A leaching system employing trees to evaporate and transpire the sewage effluent from an aerobic treatment system.
- M. "Excavator" means any person who excavates or is in the business to excavate for the purpose of installation or alteration of a disposal system whether or not said excavator is to be charged with the actual installation or alteration.
- N. "Filter" means any device or material which separates matter in suspension from a liquid.
- O. "Health Commissioner" means the health commissioner of the Franklin County District Board of Health or his authorized representative.
- P. "Household Sewage Disposal System" means any sewage disposal or treatment system or part thereof for a single family, two family, or three family dwelling which receives sewage.
- Q. "Installer" means any person who installs or is in the business of installing a disposal system or part thereof.
- R. "Leaching System" means that part of a disposal system used to dissipate the effluent from a sewage tank by means of evaporation, transpiration, soil absorption, soil percolation or any combination thereof.
- S. "Leaching Pit" means any covered pit with lining designed to permit effluent from a sewage tank to seep into the surrounding soil.
- T. "Lot" means the land area used or intended to be used as a single family, two family, or three family dwelling site.
- U. "Normal Ground Water Table" means the shallowest depth of soil which is saturated with water for an extended or permanent time period.
- V. "Nuisance" means any condition of sewage that is potentially injurious to the health, safety, comfort, or property of a person, or pollutes waters of the state.

701.01 DEFINITIONS (CONT)

- W. "Off-Lot" means any sewage disposal system that discharges treated effluent beyond the confines of an owners lot.
- X. "Person" means the state, any political subdivision, public or private corporation, partnership, firm, association, individual, or other entity.
- Y. "Point of Discharge" means the point at which the effluent from a disposal system enters a public right-of-way, body of water, or other location approved by the Board of Health.
- Z. "Pollution" means the placing of any noxious or deleterious substance in any waters of the state or affecting the properties of any waters of the state in a manner which renders such waters harmful or inimical to the public health, or to animal or aquatic life, or to the use of such waters for domestic water supply, or industrial or agricultural purposes, or for recreation.
- AA. "Privy" means any sanitary, water-less device for the collection and storage of human excreta but does not include chemical commodes or other portable receptacles.
- BB. "Sanitary Sewerage System" means any public or community sewerage collection system conveying sewage to a central sewage treatment plant.
- CC. "Seasonally High Water Table" means the shallowest depth of soil which is saturated with water during a season, a temporary period of time, or as a temporary condition.
- DD. "Secured cover" means a removable cover or manhole that prohibits unwarranted or unauthorized removal.
- EE. "Semi-Public Disposal System" means a disposal system which treats 25,000 gallons per day or less of sanitary sewage discharged from publicly or privately owned liquid waste containing animal or vegetable matter in suspension or solution and may include household wastes as commonly discharged from residences and from commercial, institutional, or similar facilities.
- FF. "Septic Tank" means any watertight, covered receptacle designed and constructed to receive the discharge of sewage from a building sewer, and to discharge the effluent from settled sewage.
- GG. "Sewage" means any liquid waste containing animal or vegetable matter in suspension or solution from water closets, urinals, lavatories, bathtubs, laundry tubs or devices, floor drains, drinking fountains, or other sanitary fixtures, and may include liquids containing chemicals in solution.

701.01 DEFINITIONS (CONT)

- HH. "Sewage Tank" means any watertight tank designed to retain sewage and includes, but is not limited to, septic tanks and aerobic type treatment tanks.
- II. "Sewage Hauler" means any person who engages in the collection, transportation, and disposal of sewage.
- JJ. "Subdivision" means that which is defined by Section 711.01 of the Ohio Revised Code.

701.02 SEWAGE DISPOSAL REQUIREMENTS

- A. The design, construction, installation location, maintenance, and operation of disposal systems including, but not limited to, septic tanks, aerobic type treatment systems, filters, leaching tile fields, leaching pits, building sewers, and privies or part thereof shall comply with these rules and engineering practices acceptable to the Ohio Department of Health and current Ohio Environmental Protection Agency effluent standards.
- B. Any dwelling, structure, or facility which is not connected to a sanitary sewerage system shall be provided with an approved disposal system prior to its being occupied.
- C. Each household sewage disposal system shall serve one dwelling on an individual lot and shall be properly maintained and operated by the owner. All the sewage from the dwelling shall discharge into the system.
- D. No disposal system or part thereof shall create a nuisance.
- E. No person shall discharge, or permit to be discharged, treated or untreated sewage, the overflow drainage or contents of a sewage tank, or other putrescible, impure, or offensive wastes into an abandoned water supply, well, spring, or cistern or into a natural or artificial well, sink hole, crevice, or other opening extending into limestone, sandstone, shale, or other rock formation, or normal ground water table.
- F. No person shall discharge, or permit or cause to be discharged, untreated sewage, the drainage or contents of a septic tank, or other putrescible or offensive wastes onto the surface of the ground, into any street, road, alley, open excavation, or underground drain.
- G. Off-lot disposal of sewage effluent shall not be permitted except where the installation of an on-lot disposal system is not possible, as specified in regulation 701.10(A), 701.10(B), and 701.11, and the following conditions are met:

701.02 SEWAGE DISPOSAL REQUIREMENTS (CONT)

- G.1. When off-lot disposal of sewage effluent requires the crossing of adjacent properties to reach the point of discharge, a recorded easement or the use of a legally established, publicly maintained drainage improvement from the dwelling lot line to the point of discharge shall be required.
- G.2. Written permission to discharge sewage effluent from the person or persons in control of the property or properties at the point of discharge shall be required.
- G.3. Sewage effluent quality as measured at the point of discharge in the system shall comply with current effluent standards established by the director of the Ohio Environmental Protection Agency. In the event there are no applicable standards established by the director of the Ohio Environmental Protection Agency, the following effluent standards shall apply:
 - a. Biochemical Oxygen Demand (five day) - The arithmetic mean of two or more effluent samples taken at intervals of not less than twenty four hours shall not exceed twenty milligrams per liter.
 - b. Suspended Solids - The arithmetic mean of two or more effluent samples taken at intervals of not less than twenty-four hours shall not exceed forty milligrams per liter.
 - c. The dissolved oxygen content must be between 3 and 7 p.p.m.
- G.4. When test results indicated that the standards set forth in regulation 701.02(G-3) are not being met or nuisances are being created, additional treatment devices may be required by the Board of Health.
- G.5. All reasonable means shall be taken to minimize the amount of effluent discharged off the lot.
- H. Lots on which household sewage disposal systems for dwellings are to be installed shall be of suitable topography, area and soil type to permit compliance with regulation 701.01 to 701.22 of the Franklin County District Board of Health.

701.02 SEWAGE DISPOSAL REQUIREMENTS (CONT)

- H.1. A suitable area shall be available to provide for the complete relocation and replacement of the household sewage disposal system as required by regulation 701.01 to 701.22 of the Franklin County District Board of Health.
- H.2. On all lots requiring both an individual water supply and a household sewage disposal system to be installed, a minimum land area of 40,000 sq. ft. will be required. Only those lots created by regulations, procedures, and policies established by the Mid-Ohio Regional Planning Commission at the time of their creation will be exempt from the 40,000 sq. ft. requirement, but must contain at least 20,000 sq.ft.
- H.3. All minimum land area requirements are appealable through provisions set forth in the variance section 701.21
- J. Lots on which individual water supplies are to be installed shall be of sufficient area to provide isolation of the water supply system from both the original household sewage disposal system and the area intended for any relocation and/or replacement on this or adjacent lots as required by regulation 701.01 to 701.22 of the Franklin County District Board of Health.
- K. A household sewage disposal system shall be a minimum of ten feet from any occupied building, ten feet from any water service line, and fifty feet from any water supply source on this or any adjacent lot.
- L. No household sewage disposal system shall be installed, maintained, or operated on property available to a sanitary Sewerage system.
- M. Whenever a sanitary sewerage system becomes available to the property, the household sewage disposal system shall be abandoned and the house sewer directly connected to the sewerage system.
- N. Roof water, foundation drain, cistern overflow, surface drainage, and subsurface drainage shall not be discharged into a household sewage disposal system.
- O. Plastics in any form, wet-strength paper, tampons, towels, cloth of any kind, rubber products, throw-away baby diapers, condoms, sanitary napkins, cigarette stubs, sand, grit, coffee grounds, excess cooking oils or greases, solvents, paints, caustic or oily liquids or materials, kerosene, gasoline, motor oil, floor waxes or any other wastes known to adversely affect the household sewage disposal system shall not be deposited or flushed in plumbing fixtures nor shall they otherwise be introduced into a building sewer or household sewage disposal system.

701.02 SEWAGE DISPOSAL REQUIREMENTS (CONT)

- P. No field tile or other subsurface drainage system shall be directly or indirectly connected to any component of an individual sewage disposal system, including curtain drains.
- Q. No field tiles or other subsurface drainage systems are to be blocked.
- R. Field tiles or other components of a subsurface drainage system damaged during the installation of an individual sewage disposal system must be repaired immediately.
- S. All field tiles or other subsurface drainage systems shall be rerouted in a manner which bypasses any area occupied by an individual sewage disposal and reconnected or outleted in a manner which will provide continual drainage. The rerouting line must be the same diameter or larger than the original tile.

701.03 SUBDIVISIONS

- A. Any person proposing to create a subdivision shall submit to the Mid-Ohio Regional Planning Commission for approval, plans clearly showing that the provisions of regulation 701.01 to 701.22 of the Franklin County District Board of Health and Subdivision Regulations of Franklin County, as amended, can be adequately met, before any of the lots in the subdivision are sold or offered for sale, whether or not such sale entails a transfer of title or deed. A separate copy of these plans shall be submitted to the Franklin County District Board of Health.
- B. No person shall install household sewage disposal systems in new subdivisions, unless it is considered to be impracticable or inadvisable by the Board of Health and the Ohio Environmental Protection Agency to install a sanitary sewerage system.
- C. If household sewage disposal systems are proposed, the plans shall show:
 - 1. The total land area to be used;
 - 2. Original topography, elevations and existing flood plains;
 - 3. Location and size of all lots;
 - 4. The types, properties and characteristics of the soils in the subdivision;
 - 5. Depth to normal and seasonal groundwater table and rock strata;

701.03 SUBDIVISIONS (CONT)

6. Location of all bodies of water, streams, ditches, sewers, drain tiles, existing and proposed water supply sources and lines on this or adjacent lots within one hundred feet of the proposed subdivision, or any other information which may affect the installation or operation of household sewage disposal systems or the enforcement of regulation 701.01 to 701.22 of the Franklin County District Board of Health;
7. Existing and finished grade of all lots;
8. Storm water management plan.

701.04 INSTALLATION PERMIT AND OFF-LOT OPERATIONAL PERMIT

- A. No person shall install, excavate to install, or alter a household sewage disposal system without an installation permit issued to him/her by the Board of Health. The owner or his/her designated agent shall obtain such installation permit from the Board of Health for the installation of a household sewage disposal system prior to the start of construction of a dwelling.
- B. No person shall install, excavate to install, or alter a semi-public disposal system without an installation permit issued to him/her by the Ohio Environmental Protection Agency or, upon the request of the Ohio Environmental Protection Agency, by the Board of Health. The owner or his/her designated agent shall obtain such installation permit from the Board of Health for the installation of said semi-public disposal system prior to the start of construction of the structure.
- C. No person shall maintain or operate an off-lot household sewage disposal system after the effective date of this rule without an off-lot operation permit obtained from the Franklin County District Board of Health. Said off-lot operation permit shall be effective from the date of issuance until the following first day of September.
- D. Application for permit shall be in writing and contain pertinent information as required by the Board of Health. Any fee established for a permit by law or authority of law shall accompany the application.
- E. The Board of Health shall issue a permit when the pertinent information indicated that the provisions of regulation 701.01 to 701.22 of the Franklin County District Board of Health or applicable state laws, rules, or regulations can be met. The Board of Health may specify terms consistent with regulation 701.01 to 701.22 or other applicable state laws, rules, or regulations on the permit governing the installation, alteration, and operation of a household sewage disposal system or semi-public disposal system.

701.04 INSTALLATION PERMIT AND OFF-LOT OPERATIONAL PERMIT (CONT)

- F. The Board of Health shall deny a permit if the information on the application is incomplete, inaccurate, or indicates that the provisions of regulation 701.01 to 701.22 of the Franklin County District Board of Health or applicable state laws, rules and regulations cannot be met.
- G. An installation permit shall remain in force until completion of the disposal system or for one year from the date of issuance, whichever occurs first. The permit may be revoked or suspended by the Board of Health. An off-lot operation permit shall remain in force until it expires, is revoked, or suspended by the Board of Health.
- H. The installation and operation of the household sewage disposal system, semi-public disposal system or any part thereof, shall conform with the requirements of regulation 701.01 to 701.22 of the Franklin County District Board of Health, all applicable state laws, rules, and regulations and the terms of the permit as required by the Board of Health in 701.04(E).

701.05 REGISTRATION OF INSTALLERS AND EXCAVATORS OF DISPOSAL SYSTEMS

- A. No person shall perform the services of an installer or excavator unless he/she holds a valid registration issued to him/her by the Board of Health.
- B. No person shall perform the services of an installer or excavator without having a surety bond for \$5,000 with the Franklin County Health Department named as obligee.
- C. Application for registration shall be in writing and contain pertinent information as required by the Board of Health. The fee established for a registration by the Franklin County Board of Health shall accompany the application.
- D. Each registration issued hereunder shall expire December 31st of each year.
- E. A renewal application for registration shall be submitted to the Board of Health at least thirty days prior to the expiration date.
- F. Every registrant shall maintain and submit to the Board of Health such data and records as may be required for determining compliance with regulation 701.01 to 701.22 of the Franklin County District Board of Health.
- G. A homeowner shall not be required to have a registration for performing work on the household sewage disposal system for the dwelling which he occupies or intends to occupy. However, the homeowner intending to perform an installation or alteration on his/her own system will be required to sign a homeowner's affidavit when applying for the installation permit. This affidavit must be notarized.

701.05 REGISTRATION OF INSTALLERS AND EXCAVATORS OF DISPOSAL SYSTEMS (CONT)

- H. Whenever the health commissioner finds that an installer, excavator, or homeowner is or has engaged in practices which are in violation of any provision of regulation 701.01 to 701.22 of the Franklin County District Board of Health, any applicable state law, rule or regulation or the terms of any permit as required by the Board of Health in regulation 701.04(E) under which installation is performed, the Board of Health shall give notice in writing to the registrant describing the alleged violation and state that an opportunity for a hearing will be provided by the Board of Health to show cause why his/her registration should not be suspended or revoked or, in the case of a homeowner, other legal remedies should not be pursued.

701.06 REGISTRATION OF SEWAGE HAULERS

- A. No person shall perform the services of a sewage hauler unless he/she holds a valid registration issued to him/her by the Board of Health.
- B. No person shall perform the services of a sewage hauler without having a surety bond for \$5,000 with the Franklin County Board of Health named as obligee.
- C. Application for registration shall be in writing and contain pertinent information as required by the Board of Health. Any fee established for registration by law or authority of law shall accompany the application.
- D. Each registration issued hereunder shall expire on December 31st of each year.
- E. A renewal application for registration shall be submitted to the Board of Health at least thirty days prior to the expiration date.
- F. Every registrant shall maintain and submit to the Board of Health such data and records as may be required for determining compliance with regulation 701.01 to 701.22 of the Franklin County District Board of Health.
- G. Whenever the health commissioner finds that a sewage hauler is or has engaged in practices which are in violation of any provision of regulation 701.01 to 701.22 of the Franklin County District Board of Health, the terms of the registration permit as required by the Board of Health in regulation 701.06(C), or applicable laws of the state, the Board of Health shall give notice in writing to the registrant describing the alleged violation and state that an opportunity for a hearing will be provided by the Board of Health to show cause why his/her registration should not be suspended or revoked.
- H. Any area used for the disposal and dumping of the contents collected and transported by the sewage hauler must be approved by the Board of Health as a dumping site and comply with regulation 701.01 to 701.22 of the Franklin County Board of Health.

701.06 REGISTRATION OF SEWAGE HAULERS (CONT)

- I. All vehicles owned and operated by the sewage hauler must be marked with the name of the company and/or owner and its business phone number. The name and phone number must be displayed on each side of the vehicle and be at least 4" in size.
- J. Any violation of applicable state or local ordinance including but not limited to the Ohio Revised Code, Chapter 3767 can cause the suspension or revocation of the registration.
- K. No vehicle (including tank trailers) is to be used for the collection, transportation, or disposal of sewage and/or liquid waste within the jurisdiction of the Franklin County District Board of Health without a vehicle permit issued by the Franklin County Board of Health.
- L. All vehicles (including tank trailers) must be inspected and approved by the Health Commissioner or his/her Representative before being permitted for use in the collection, transportation, or disposal of sewage and/or liquid waste within the jurisdiction of the Franklin County District Board of Health.
- M. Application for a vehicle permit shall contain such information as deemed necessary by the Health Commissioner which includes but is not limited to vehicle make, model, tank capacity, color, license plate number, and serial number. Any fee established for the permit by law or authority of law shall accompany the application.
- N. All permitted vehicles (including tank trailers) must display a permit sticker issued by the Franklin County District Board of Health on each side of the tank, toward the rear.

701.07 SEPTIC TANKS

- A. The minimum capacity of septic tanks shall be:
 - 1. Single family dwelling:
 - a. One to two bedroom: 1,000 gallons.
 - b. Three bedrooms: 1,500 gallons in one or two tanks or compartments.
 - c. Four to five bedrooms: 2,000 gallons in two tanks or compartments.
 - d. Six or more bedrooms: 2,500 gallons in two tanks or compartments.
 - 2. Two or three family dwelling: the sum of the bedrooms for each single family residential unit within the dwelling as defined by section 701.07(A).

701.07 SEPTIC TANKS (CONT)

- B. In systems using two tanks, the septic tanks shall be connected in series and all sewage shall initially enter the first tank.
- C. The invert level of the inlet shall be not less than two inches above the liquid level of the tank.
- D. A vented inlet baffle shall be provided to divert the incoming sewage downward. The baffle shall penetrate at least six inches below the liquid level, but the penetration shall not be greater than that allowed for the outlet device.
- E. The outlet shall be fitted with a vented tee, vented ell, or baffle which shall extend not less than six inches above and not less than eighteen inches below the liquid level of the tank.
- F. The septic tank shall have a liquid drawing depth of not less than four feet.
- G. The distance from the flow line to the cover shall be at least twelve inches.
- H. The septic tank shall be installed with a minimum of two secured covers extending to at least 3" above grade to provide access to each compartment of the tank at the inlet and outlet for Inspection and cleaning. The cover shall have a minimum inside diameter of ten inches.

[SEE APPENDIX A FOR SPECIFIC REQUIREMENTS]

701.08 AEROBIC TYPE TREATMENT SYSTEMS

- A. Aerobic type treatment systems shall comply with current issue of standard number forty, Class I as adopted by the National Sanitation Foundation Board of Trustees or standards accepted as equivalent by the Ohio Department of Health relating to materials, design, construction, performance, operation, maintenance, and safety of the system in effect at the time of acceptance of a system by the Ohio Department of Health, and the requirements of regulation 701.01 to 701.22 of the Franklin County District Board of Health.
- B. In addition to division (A) of this section, aerobic type treatment systems shall comply with the following requirements:
 - 1. Where a final effluent sample cannot easily be obtained from within the system, a sampling or inspection well, immediately following the system shall be provided. The sampling or inspection well, with a minimum inside diameter of eight inches, shall be accessible from the surface of the ground, and shall be provided with a secured cover.

701.07 AEROBIC TYPE TREATMENT SYSTEMS (CONT)

2. The system shall be sized on the basis of one hundred-twenty gallons per day per bedroom.
 3. The system shall not be installed where the estimated daily flow exceeds the rated capacity at which the system was tested and approved.
- A. An aerobic type treatment system may be permitted under the conditions provided in regulation 701.02(G) for off-lot discharge, or in conjunction with a leaching tile field, or other means approved by the Board of Health and/or the Ohio Department of Health to prevent water pollution or a nuisance.
- B. Prior to off-lot discharge, the effluent from an aerobic type treatment system shall discharge through a filter conforming to the requirements of regulation 701 of the Franklin County District Board of Health, or other method approved by the Board of Health and/or the Ohio Department of Health to provide additional treatment so that the requirements of regulation 701.02(G-3) can be met.
- E. The aerobic type treatment system shall be installed with a secured cover extended to at least 3" above grade to provide access to the tank for inspection and cleaning. The cover shall have a minimum inside diameter of ten inches.
- F. All aerobic type treatment systems must be provided warning or burn-out indicating lights and said lights are to be located in an easily accessible location.

701.09 CHLORINATION TREATMENT

- A. The Franklin County District Board of Health has the right to require chlorination on off-lotting sewage systems.
- B. When chlorination is required, the chlorine tank must be in design to allow a minimum of 15 minute retention time.

701.10 INSTALLATION REQUIREMENTS FOR SOIL ABSORPTION AND PERCOLATION

- A. Leaching systems utilizing soil absorption or percolation shall not be permitted where the depth to normal ground water table or rock strata is less than four feet below the bottom of the proposed system.
- C. Leaching systems utilizing soil absorption or percolation shall not be installed where the texture, structure or permeability of the soil is not suitable to provide internal drainage. The health commissioner may require the owner, at the owner's expense, to provide a written site evaluation by a qualified person before a final decision is made in issuing a permit.

701.10 INSTALLATION REQUIREMENTS FOR SOIL ABSORPTION AND PERCOLATION (CONT)

- D. It is to be understood, that no system can be guaranteed because of soil characteristics. Only workmanship is considered at the time of inspection.
- E. The current Franklin Soil and Water Conservation District "Soil Potential Index" will be used to determine the suitability of the site and soils for an individual sewage disposal system.

701.11 LEACHING TILE FIELDS

- A. 4" leaching tile fields must comply with the following:
 - 1. Total field requirement shall be divided into two equal sections and provided with a diversion device equipped to provide alternate flow to each section of the field. The diversion device shall be brought to at least 3" above grade and shall be provided with a secured cover. 4" Schedule 40 or equivalent pipe shall be required from the tank to the diversion device.
 - 2. Leaching field absorption area requirements for disposal systems shall be adequate to prevent water pollution or a nuisance, except those sites eliminated by regulation 701.01 to 701.22 of the Franklin County District Board of Health.
 - 3. The minimum distance between any leaching lines shall be six feet.
 - 4. The minimum distance between any leaching line and any drain line located on the lot shall be eight feet.
 - 5. A leaching trench shall have a minimum of twelve inches of clean, washed gravel or stone fill, extending at least two inches above and six inches below the leaching line; such fill shall be three-fourths inch to one and one-half inches in size.
 - 6. A leaching trench shall have a minimum width of eight inches. The depth shall be a minimum of eighteen inches but not more than thirty inches.
 - 7. A leaching line shall have a maximum length of one hundred-fifty feet unless dosed.
 - 8. A leaching line shall have a minimum diameter of four inches and shall have a relatively level grade. The grade shall not exceed a fall of three inches in fifty feet.

701.11 LEACHING TILE FIELDS (CONT)

9. The top of the gravel stone fill shall be covered with a pervious material such as untreated roofing paper or a two inch layer of hay, straw, or similar material before being covered with earth.
 10. The land surface shall be graded so as to exclude surface drainage from the disposal site.
 11. Leach fields shall have a vent provided at the end of each section of the leach field. The ends of each section of the leach field shall be connected together unless previously approved by the board of health to facilitate uniform venting. All vents must have a 4" minimum diameter and shall be bent downward, leaving 6" clearance from the surface of the ground.
 12. The installer of disposal systems is responsible for all grading toward, onto, or away from a newly installed disposal system.
- B. 8 inch gravel-less leaching. In addition to the requirements in 701.12 (a), 8" gravel-less leaching tile fields must comply with the following:
1. All 8" gravel-less leaching tile fields will be sized at one-to-one basis, equivalent to the amount of lineage/footage that would be required in a 4" graveled leaching tile field.
 2. The leaching trench shall have a minimum width of 16" and a maximum width of 36".
 3. A leaching line shall have a relatively level grade which shall not exceed a fall of 1" per 100 ft.
 4. If the 8" leaching tile is determined to be humped or crooked in the trench, the sanitarian may require the tile to be strapped or staked to maintain level grade.
 5. 8" gravel-less leaching trenches shall have a minimum of two inches of coarse, clean sand placed at the bottom of each trench under the tile. The trench will be backfilled with sand to a level two inches above the tile.

701.12 CURTAIN DRAIN

- A. A curtain drain shall be provided in soil subject to a seasonally high ground water table. The curtain drain shall be installed not less than six inches below the leaching trench bottom, and shall be at least eight feet from the center line of any leaching line.

701.12 CURTAIN DRAIN (CONT)

- B. A curtain drain trench shall have a minimum of twelve inches of clean, washed gravel or stone fill. Such fill shall be three-fourth inch to 2 inches in size.
- C. A curtain drain shall have a sampling or inspection well accessible from the surface of the ground and shall be provided with a secured cover. The well shall have a minimum inside diameter of eight inches and shall be on the discharge line adjacent to the leaching system unless an open out-fall is present on the property.
- D. When off-lot disposal of curtain drain discharge requires crossing adjacent properties to reach the point of discharge, a recorded easement or the use of a legally established, publicly maintained drainage improvement from the dwelling lot line to the point of discharge shall be required.
- E. No curtain drain shall receive discharge from a field tile or subsurface drainage system.

(SEE APPENDIX B FOR SPECIFIC REQUIREMENT AND DESIGN)

701.13 LEACHING PIT

- A. A leaching pit shall be installed only in areas where gravel deposits underlie the ground surface and the seasonally high water table is not less than ten feet below the bottom of the leaching pit. Test borings to determine the suitability of the soil shall be constructed to a depth of at least ten feet below the bottom of a proposed leaching pit prior to issuance of an installation permit.
- B. A leaching pit shall be a minimum of one hundred feet from any water supply source, ten feet from any lot or right-of-way line, and twenty feet from any occupied building.
- C. A leaching pit shall be provided with a secured cover extended to ground level.

701.14 SUBSURFACE SAND FILTER

- A. A subsurface sand filter shall be permitted only under the conditions provided in regulation 701.02(G) of the Franklin County District Board of Health.

701.14 SUBSURFACE SAND FILTER (CONT)

- B. A subsurface sand filter shall have a minimum filter area of two hundred-forty square feet per bedroom unless the filter is dosed. When dosed, the filter shall have a minimum filter area of three hundred square feet or one hundred-twenty square feet per bedroom, whichever is greater. The total filter area shall be divided into two beds, each with a separate distribution system. Provisions shall be made for alternating from one bed to the other by gravity or pumping.
- C. A dosing tank shall have a minimum working volume of seventy-five gallons, shall extend to at least 3" above grade, and shall be provided with a secured cover.
- D. When a subsurface sand filter is dosed, the distribution system shall be vented to the surface of the ground at the lower end of each bed by one or more vented caps having a minimum inside diameter of four inches.
- E. All distribution lines shall have a minimum diameter of four inches and shall have a relatively level grade. The grade shall not exceed a fall of three inches in fifty feet.
- F. The distribution lines shall be installed within a minimum of twelve inches of clean, washed gravel or stone three-fourths inch to one and one-half inches in size which covers the entire bed. The lines shall be laid on three foot centers, and eighteen inches from the sidewalls of the filter.
- G. The filtering material shall be a minimum of eighteen inches in depth and the sand shall be an effective size of four-tenths to one millimeter with a uniformity coefficient not to exceed three.
- H. The lower or collecting line shall have a minimum diameter of four inches and shall be laid the full length of the bed. The grade shall have a minimum fall of six inches in fifty feet.
- I. The collecting line shall be installed within a minimum of twelve inches of clean, washed gravel or stone three-fourths to one and one-half inches in size which underlies the entire bed.
- J. The top of the filter shall be covered with a pervious material such as untreated roofing paper or a two inch layer of hay, straw, or similar material before being covered with earth.
- K. The earth cover shall not exceed eighteen inches.

701.14 SUBSURFACE SAND FILTER (CONT)

- L. A sampling or inspection well with a minimum inside diameter of eight inches shall be installed on the subsurface sand filter discharge line within six feet of the filter bed, accessible from the surface of the ground, and provided with a secured cover.

701.15 EVAPO-TRANSPIRATION ADSORPTION SYSTEM

- A. An evapo-transpiration adsorption system must use a Class I aerobic type sewage tank approved by the Franklin County District Board of Health.
- B. The dosing chamber must be at least 24" in diameter and shall be constructed of concrete or other material approved by the Board of Health. The chamber must have a minimum 1/4 horse power automatic sewage pump with a check valve on the discharge side. The dosing chamber must provide a minimum dosing capacity of 60 gallons or not less than a capacity equal to 75% of the interior capacity of the tile to be dosed at one time. It must be provided with two inches of approved insulation on the inside, underneath portion of the secured cover.

(SEE APPENDIX C FOR SPECIFIC REQUIREMENTS AND DESIGN)

- C. The gravel trench following the dosing chamber must be two feet deep and three feet wide filled with three-fourths to two inch washed stone or gravel. The gravel trench must be a minimum one hundred feet in length. The rigid tile in the trench must be four inches in diameter, perforated, and have bottom discharge. The tile must meet a 1,500 pound crush test. This tile must have a 4" tee vent riser at a minimum 6 inches above grade, installed at the midpoint of the trench.
- D. All evapo-transpiration adsorption systems must be provided with a sampling or inspection well at the end of the gravel trench.
- E. The trees must be a minimum of four feet in height and approved by the Board of Health. They must be planted at six foot off center intervals, alternating on each side of the trench pipe. A thirty inch earth mound must cover the gravel trench to divert surface water at least six feet on each side of the perforated tile.
- F. A curtain drain must be installed around the entire gravel trench following the requirements of regulation 701.12.

701.16 PRIVY

- A. A privy shall be provided with watertight vaults or other water tight receptacles of not less than five hundred gallon capacity except as specified in division (B) of this section and shall be a minimum of fifty feet from any water supply source, and twenty feet from any occupied building or lot or right-of-way line.
- B. A vault may be constructed with an open or porous bottom if it is located not less than one hundred feet from any water supply source, and so located that the liquids leaching from the vault will not discharge at the ground surface, or into limestone, sandstone, shale, or other rock formation. The vault shall not be permitted where the depth to the seasonally high water is less than four feet below the bottom of the proposed vault.
- C. The construction and design of the vault and superstructure shall prevent access by insects, fowl, or animals.
- D. A privy shall be cleaned before the contents reach the top level of the vault.

701.17 BUILDING SEWER

- A. A building sewer shall have a minimum diameter of four inches.
- B. A building sewer shall be watertight and constructed of durable material, capable of withstanding a ten foot head of water test or equivalent and meet NSF (National Sanitation Foundation) schedule forty requirements.
- C. Traps shall not be installed in a building sewer.
- D. All building sewers must be provided with a clean-out outside the building foundation.
- E. A building sewer shall be laid in good alignment and embedment at a uniform grade in accordance with engineering practices acceptable to the Ohio Department of Health and/or the Board of Health.
- F. A building sewer shall be a minimum of ten feet from any household water supply source and/or water service line.
- G. Ninety degree elbows are not permitted on a building sewer unless approved by the Board of Health prior to installation.

701.18 INSPECTIONS

- A. The Health Commissioner may at any reasonable time during the course of construction or any time thereafter inspect any disposal system or part thereof, sample the effluent, or take any other steps which he deems necessary to insure proper compliance with regulation 701.01 to 701.22 of the Franklin County District Board of Health and all applicable state laws, rules, and regulations. The Health Commissioner may utilize inspection reports or other data submitted or obtained from reliable sources to determine compliance.
- B. The owner or his/Her agent shall request inspection of the disposal system or part thereof at least twenty-four hours: 1) in advance of covering; 2) prior to placing into operation.
- C. No household sewage disposal system or semi-public disposal system, or part thereof shall be covered or put into operation until the system has been inspected and approved by the Health Commissioner or representative of the Board of Health.

701.19 ABANDONED DISPOSAL SYSTEM

An abandoned sewage tank shall be emptied, the top crushed in, and filled to the ground surface with material acceptable to the Franklin County District Board of Health. An abandonment form prescribed by the board of health shall be properly completed and submitted to the health department immediately upon abandoning the sewage tank.

701.20 HEARING

The Board of Health shall grant a hearing to any person affected or aggrieved by regulation 701.01 to 701.22 of the Franklin County District Board of Health.

701.21 VARIANCE

- A. The Board of Health may grant a variance from the requirements of regulation 701.01 to 701.22 of the Franklin County District Board of Health as will not be contrary to the public interest, where a person shows that because of practical difficulties or other special conditions their strict application will cause unusual and unnecessary hardship. However, no variance shall be granted that will defeat the spirit and general intent of said regulations, or be otherwise contrary to the public interest.

701.21 VARIANCE (CONT)

- B. Experimental systems may be installed under the provision of 701.21 (A) provided the director of health and/or Board of Health concurs in writing with the design and evaluation plan.
- C. Household sewage disposal system components or household sewage disposal systems differing in design or principle of operation from those set forth in regulation 701.01 to 701.22, may qualify for approval as a special device or system; provide, comprehensive tests and investigations show any such component or system produces results equivalent to those obtained by sewage disposal components or systems complying with such regulations. Such approval shall be obtained in writing from the director of health or the Board of Health.

701.22 EFFECT OF PARTIAL INVALIDITY

In any case where a provision or section of this regulation is found to be in conflict with a provision or section of any zoning, building, fire, safety, or health regulation or code of Franklin County existing on the effective date of this regulation, the provision or section which establishes the higher standard for the promotion and protection of the health and safety of the people shall prevail. In any case where a provision or section of this regulation is found to be in conflict with a provision or section of any other regulation or code of the Franklin County Board of Health existing on the effective date of this regulation which establishes a lower standard for the promotion and protection of the health and safety of the people, the provision or section of this regulation shall be deemed to prevail, and such other regulations or codes are hereby declared to be repealed to the extent that they may be found in conflict with this regulation. If any section, subsection, paragraph, sentence, clause, or phrase of this regulation should be declared invalid for any reason whatsoever, such decision shall not affect the remaining portions of this regulation, which shall remain in full force and effect; and to this end the provisions or sections of this regulation are hereby declared to be severable.

APPENDIX A

MATERIAL AND SIZE SPECIFICATIONS:

SEPTIC TANK AND LEACHING TILE FIELDS

Septic tanks must meet ASTM-C-27.4 standards governing water and waste water systems or NSF schedule forty (40) unless approved by the Board of Health.

SIZES:	1 to 2 bedrooms	1,000 gallons
	3 bedrooms	1,500 gallons
	4 or 5 bedrooms	2,000 gallons*
	6 or more bedrooms	2,500 gallons*

* (in two tanks or compartments)

LEACHING TILE FIELD REQUIREMENTS AND SIZES

Leaching tile must be a minimum of four inches (4") in diameter, 1,500 lb. crush test rigid tile, vitrified clay tile or approved 8" gravel-less pipe. Leaching tile fields must be in two (2) separate sections divided by a diversion box.

MINIMUM REQUIREMENTS FOR BUILDING SEWER

1. A building sewer shall have a minimum diameter of four inches (4").
2. A building sewer shall be constructed of durable material with tight joints, capable of withstanding a ten foot (10') head of water test or equivalent and meet NSF schedule forty (40) requirements.

Explanation: Building sewer shall be constructed of case iron, ABS plastic (ASTM-D 2661) or PVC plastic (ASTM 2665, ASTM F891, ASTM F628). All building sewer pipe must meet schedule forty (40) pressure pipe and National Sanitation Foundation (NSF) approval.

APPENDIX B

CURTAIN DRAIN POLICY

Recently there have been misconceptions regarding this department's policies and concerns about the utilization of curtain drains. We would like to address these concerns and policies in written and diagrammatic form.

The overwhelming majority of the soils in Franklin County have characteristically seasonally high groundwater tables. The purpose of a curtain drain is to depress the seasonally groundwater table within the area of the soil absorption field; thus increasing the absorption capacity of the soil. The majority of the soils in Franklin County have a seasonal groundwater table within one-half to three feet below the soil surface.

We have consulted with the Ohio Department of Health and the Franklin County Soil and Water Conservation Office. All agreed that the following minimum standards for a functional curtain drain are appropriate:

- A. The curtain drain must be a minimum of eight (8) feet measuring from trench center lines) from leaching trenches.
- B. The depth to the top of the curtain drain tile must be at least six inches below the bottom of the leaching trench.
- C. A minimum of twelve inches of gravel (clean, washed and between three-quarters and two inches in size) must be in the curtain drain trench.
- D. A curtain drain shall be installed with all new leaching devices, or extensively altered leaching systems.
- E. If gravity flow to the point of discharge cannot be obtained, then mechanical means must be used.
- F. An inspection port, accessible from the surface of the ground, must be provided unless the discharge is an open out-fall on-lot.

APPENDIX C
EVAPO SPECIFICATIONS

AERATION PLANT:

1. The aeration tank must be an Ohio Department of Health approved home aeration plant.
2. The aeration tank must be at least a Class II plant.
3. The aeration plant must have at least a treatment capacity of 120 gallons per bedroom per day.
4. The tank must be provided with an inspection riser.

FILTER:

1. A filter is to be used according with the manufacturer's specifications for the type of aeration unit used.
2. A riser must be provided.

SEWAGE PUMP PIT:

1. The pit must be so designed as to allow dosing of the evapo trench.
2. The minimum dosing volume is 60 gallons for a 100 feet trench. For additional 35 feet of trench, add 20 gallons.
3. The pump pit must be placed outside the edge of the completed mound.
4. The pump pit is a minimum of 24 inches in diameter.

SEWAGE PUMP:

1. The sewage pump must have at least a ¼ horsepower motor.
2. The sewage pump must be rated at 32 gallons per minute at 10 feet tdh.
3. The discharge line must be provided with a check valve to prevent backflow and be 1-1/4 inches of schedule 40 PVC pipe.
4. There must be a pump "on" and "off" float switch.

EARTH MOUND:

1. The mound must be composed of top soil over the entire trench and clay soil to the mound edge (see mound and trench details drawing).
2. The mound is to be 30" at the highest point.
3. The mound is to be evenly sloped to a 12 foot width.
4. The length of the mound is determined by the number of potential bedrooms. The minimum is 100 feet for a three bedroom home. The minimum additional length of trench is 35 feet per bedroom.
5. The mound must be seeded or planted with vegetation immediately upon completion.

TREES:

1. The minimum height of trees is 4 to 5 feet.
2. The only trees accepted for the evapo system are the Austrian Pine, White Pine, White Spruce, and Arborvitae. No other tree will be considered.
3. The Arborvitae is highly recommended because it is native to this area and climate, less sensitive to transplanting, and is heartier than most evergreens.
4. The trees are to be planted 3 feet from both ends and 6 feet from each other.
5. The trees are to be planted in an alternating fashion on each side of the distribution pipe.
6. The number of trees is determined by the length of the trench. There are to be 16 trees for 100 feet of trench. Another 6 trees are to be planted for each additional 35 feet of trench.

GRAVEL TRENCH:

1. The gravel trench is to be 24 inches deep and 36 inches wide.
2. The gravel trench must be filled with $\frac{3}{4}$ inch to 2 inches of washed gravel or stone. Limestone is not permitted.
3. The distribution pipe must be 4 inches perforated rigid pipe and be rated with at least 1,500 pound test.

GRAVEL TRENCH: (CONT)

4. The pipe is to be placed so that the holes are toward the bottom of the trench
5. The distribution pipe must be absolutely level throughout the trench.
6. There is to be an inspection box at the end of the pipe. This inspection box is to extend above the final grade and be at least 12 inches in diameter.
7. There is to be a 4 inch inverted vent as near to the center of the trench as possible.
8. The trench is to be covered with 2 inches of hay or straw.
9. The top of the gravel trench is to be at existing grade level.
10. The top of the distribution pipe is to be 4 inches below the top of the trench.

CURTAIN DRAINS:

1. The bottom of the trench is to be 6 inches below the bottom of the gravel trench.
2. There is to be 2 inches of gravel below the pipe and at least 6 inches above the pipe for a total of 12 inches of gravel.
3. There must be at least 12 inches of excavating earth backfill on the top portion of the trench.
4. The trench must be at least 8 inches wide.
5. The gravel must be $\frac{3}{4}$ inch to 2 inches washed gravel or stone.
6. The curtain drain pipe is to be 18 inches from the edge of the earth mound or 6 feet from the side of the gravel trench.
7. The pipe must be 4 inches in diameter.
8. There is to be an inspection box at a location between the trench end and the discharge point, unless the end of the drain has free fall where a sample could easily be taken. If an inspection box is provided, it must extend above the final grade and be at least 12 inches in diameter.
9. If a lift station is necessary, it must extend above the surface of the ground and contain at least a $\frac{1}{4}$ horsepower pump.

OTHER SPECIFICS:

1. Only sewage contractors, registered and bonded in Franklin County, are permitted to install an evapo system. Homeowners will not be allowed to install this system.
2. The installer is responsible for the entire system, which includes the trees.
3. No final approval will be given until the system is completed.
4. For new homes, occupancy cannot occur until final approval has been given by this department.
5. For existing homes, use of the system will be prohibited until approval has been given by this department.
6. Installers have the responsibility to assure that final lot grading does not cause surface water flows to or onto the evapo system.